

Application No. 10/684,671  
Amendment dated July 25, 2006  
Reply to Office Action of April 5, 2006

### **REMARKS/ARGUMENTS**

Responsive to the Official Action mailed April 5, 2006, applicants have further amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 14 has been amended. Reconsideration is respectfully requested.

Applicants have revised claim 14 to correct the inadvertent typographical error.

In the Action, the Examiner rejected the pending claims under 35 U.S.C. §112, noting certain claim language in connection with applicants' recited polymeric binder composition which were considered to be indefinite. By this response, applicants have carefully revised the claim language, consistent with their disclosure at page 9, line 32, page 10, line 5, and page 10, lines 23-26. It is believed that this rejection can now be withdrawn.

In rejecting the pending claims under 35 U.S.C. §103, the Examiner has relied upon U.S. Patent No. 4,925,722, to Jeffers et al., in view of U.S. Patent No. 5, 458,962, to Birch. However, it is respectfully submitted that the present invention is neither taught nor suggested by these references, even when combined, and accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

As discussed in the Specification, the present invention is directed to a nonwoven fabric for buffing applications constructed from staple length polyester fibers, to thereby facilitate economical fabric formation. Notably, the fabric has a three-dimensional image imparted thereto which facilitates retention of associated buffing compounds. Fabric durability is achieved by the use of a polymeric binder composition which has been applied to the fabric, and which contains 0.2% to 0.5%, by weight, of melamine polymeric compound, and 10% to

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25%, by weight, acrylic/copolymer compound, which thus imparts improved durability for buffing surfaces. In particular, the resultant fabric has a basis weight of at least 3.5 ounces per square yard, a combined tensile strength of at least about 900 grams per ounce of fabric, and a Taber Abrasion of at least 1,000 cycles.

The Jeffers et al. reference is directed to wipes fabricated by two-sided fluid entanglement of a composite web, including carded and randomized layers fabricated of a blend of at least 10% rayon and polyester fibers to provide a fabric having a basis weight in the range of 45-70 gsm (1.6 to 2.5 ounces per square yard: see Abstract). The reference states that a binder composition can be applied to the fabric, such as an acrylic adhesive binder applied to saturate the fabric (see column 5, lines 27-38). Thus, as will be evident, the primary reference teaches the formation of a fabric construct having a basis weight which is significantly below applicants' presently claimed minimum basis weight, thus suggesting its lack of suitability for buffing applications.

Not surprisingly, Jeffers et al. fails to disclose providing a three-dimensional image in the fabric, and does not teach or suggest that the resultant fabric exhibit a combined tensile strength of at least about 900 grams per ounce, or that the fabric construct is capable of providing a Taber Abrasion of at least 1,000 cycles.

Applicants respectfully refer to Tables 1 and 2 of their disclosure, wherein working examples of the present invention are described, with comparative conventional fabrics, lacking a three-dimensional pattern, also having been tested. It is believed that the comparative fabrics are generally representative of the types of webs contemplated by Jeffers et al. in this respect,

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with such fabrics exhibiting significantly inferior tensile strength and loading capacity than the webs of Examples 1 and 2, representing the present invention.

It is respectfully noted that the secondary Birch reference describes a fundamentally different type of web than Jeffers et al., so one of ordinary skill in the art would not consider combining these two diverse references to develop the current invention.

Birch describes open, air-laid nonwoven webs, made with a Rando Webber web-forming machine which are *not* hydroentangled. Instead, the air-laid webs are pre-bonded in a not convection oven to bond the belt-bondable fibers together at points of intersection, with the webs then further adhesively bonded at contacting points throughout the web with globules of binder comprising an acrylate monomer, and an acrylamide monomer/a cross-linked reaction product of polyol and melamine cross-linking agents/a reaction product of urea derivative and formaldehyde (see column 11, lines 35-50; Examples 1-12; Abstract).

As noted by the Examiner in the Official Action, Birch indicates that the uncoated fibrous webs have a weight ranging from about 300 to about 100 grams per square meter (see column 13, lines 28-31). However, Birch *does not* teach anything that relates to hydroentangled webs, such as contemplated by Jeffers et al. Instead, Birch consolidates the webs differently, using web melt-bonding, and with adhesive binder deposited at the contacting fiber points throughout the air-laid melt-bonded web.

Applicants respectfully refer to M.P.E.P. Section 2143.01, which specifically requires "the prior art must suggest the desirability of the claimed invention", with the M.P.E.P. requiring:

It is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the

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proposed substitution, combination, or other modification (citation omitted).

In view of the diverse teachings of the primary and secondary references, it is respectfully maintained that those skilled in the art would not consider combining their diverse teachings, and thus, it is respectfully submitted that these references do not teach or suggest applicants' novel invention as claimed.

In view of the foregoing, formal allowance of claims 14, 17, and 18 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated blow.

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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I hereby certify that this Amendment is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 CFR 1.10 addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, Express Mail Label No. EV 843641003 US on **July 25, 2006**.

  
Colleen Davison